

with the smallest elevations and depressions of the internal cast, from which the foregoing description was drawn up.

Locality and position. Upper part of the Corniferous group, Sylvania, Lucas County, Ohio. Devonian. Mr. Gilbert's collection.

DALMANITES OHIOENSIS, Meek.

Pygidium large, depressed, semi-elliptic or semi-oval in general outline, nearly straight or gently convex in outline on the anterior margin, with the lateral angles a little rounded; posterior extremity somewhat raised and truncated, with the lateral angles of the truncated margin produced into two rather short, distinctly converging spines. Mesial lobe narrow, or only equalling half the breadth of each lateral lobe at the anterior ends, depressed and gradually tapering to the posterior end, which terminates very near the truncated posterior margin; rather distinctly separated by the furrow on each side from the lateral lobes; segments about eighteen, passing straight across, and separated by well-defined furrows, that are narrower than the segments themselves, which are not furrowed. Lateral lobes most convex along somewhat within the middle, where they are nearly or quite as high as the mesial lobe, toward which they slope slightly on the inner side, while beyond the middle they slope off gradually to the lateral margins, which are very narrow, not thickened above, and curve outward nearly horizontally; segments about fifteen, widening slightly outward, and separated by deep, well-defined furrows extending very nearly to the lateral margins; the larger ones showing faint traces of a slender longitudinal furrow along the middle, while all, excepting a few of the smallest posterior ones, are produced beyond the lateral margins in the form of slender, sharp rounded spines, that curve a little backward and upward. Surface nearly or quite smooth. Thorax and cephalic shield unknown.

Length of pygidium, 1.70 inch; breadth, 2.70 inches; height or convexity, 0.25 inch; breadth of posterior truncation, 0.45 inch; length of longest spines projecting from lateral margin, 0.38 inch.

This Trilobite seems to be closely allied to *D. myrmecophorus* (= *Asaphus myrmecophorus*), Green, to which I was at one time inclined to refer it. A careful comparison, however, with the 1871.]

description of that species given by Green and Hall, seems to show that our fossil cannot be properly considered identical. In the first place, it differs in having the mesial lobe only just half as wide as each of the lateral (measuring both at their anterior ends), instead of only about one-third as wide (see dimensions *D. myrmecophorus*, given in the Fifteenth Report, Regents Univ. N. Y., on State Cab. N. H., p. 18). Again, it shows no traces whatever of nodes or spines (excepting the marginal spines) on any of the segments, either of the mesial or lateral lobes; while in Green's species the segments of the lateral lobes are described, in the Regents' Report above cited, and also by Green, as being marked by one or two rows of nodes, and those of the mesial lobe are described in the Regents' Report as being marked each by three spines. Our species also shows a faintly impressed mesial line along each segment of the lateral lobes, not mentioned either by Hall or Green in describing *D. myrmecophorus*.

Green gives the number of segments in the middle lobe of the pygidium as fourteen, and in each lateral lobe as thirteen; while in apparently a larger specimen (three inches in length), Prof. Hall counted twenty-four segments in the axis, and twenty in each lateral lobe; from which we may infer that the number of segments varied somewhat with the size of the specimen in that species.

Although nothing is known of the cephalic shield of this species, or, I believe, of that described by Green, I have little or no hesitation in expressing the opinion that at least the form here under consideration possessed the peculiar perforated or digitated extension of its anterior margin seen in *D. selinurus*, and hence that it belongs to Mr. Conrad's subgenus *Odontocephalus*.

Another specimen in the collection from the same locality and position as that from which the foregoing description was made out, consisting of a rude cast of the pygidium, shows the same proportional breadth of the mesial and lateral lobes, and apparently about the same number of segments, but differs in being proportionally longer, its length being to its breadth as about 8 to 11, instead of about 8 to 13. It also differs in having the spines on each side of the truncated posterior extremity distinctly larger than in the form above described, and directed straight backward as in *D. selinurus*, instead of converging, as in the last. The spines along its lateral margins, however, are, on the contrary,

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proportionally decidedly smaller. This, I suspect, belongs to a distinct species; but, as the specimen is too much eroded to show its surface character clearly, I have preferred to refer it doubtfully, for the present, to the same.

Locality and position. Marblehead, Ohio. Corniferous group of the Devonian. 4